

## AGC/WSDOT Structures Team Minutes

June 17, 2005

Members in Attendance

Attendees:	Company:	Phone:	E-mail:
Ayers, Scott	Wilder Const.	425-508-3246	<a href="mailto:scottaye@wilderconstruction.com">scottaye@wilderconstruction.com</a>
Case, Derek	WSDOT-NWR	425-433-2002	<a href="mailto:cased@wsdot.wa.gov">cased@wsdot.wa.gov</a>
Foster, Marco	WSDOT-NWR	360-757-5999	<a href="mailto:fosterm@wsdot.wa.gov">fosterm@wsdot.wa.gov</a>
Hilmes, Bob	WSDOT-ER	509-324-6232	<a href="mailto:hilmesb@wsdot.wa.gov">hilmesb@wsdot.wa.gov</a>
Kapur, Jugesh	WSDOT_HQ	360-705-7209	<a href="mailto:kapurju@wsdot.wa.gov">kapurju@wsdot.wa.gov</a>
Madden, Tom	WSDOT UCO	206-768-5861	<a href="mailto:maddent@wsdot.wa.gov">maddent@wsdot.wa.gov</a>
McCoy, Charlie	Atkinson Const.	425-255-7551	<a href="mailto:charlie.mccoy@atkn.com">charlie.mccoy@atkn.com</a>
Olson, Ryan	Mowat Const.	425-398-0205	<a href="mailto:ryan.olson@mowatco.com">ryan.olson@mowatco.com</a>
Owings, Don	WSDOT-SWR	360-905-2093	<a href="mailto:owingsd@wsdot.wa.gov">owingsd@wsdot.wa.gov</a>
Schettler, Jim	Jacobs Civil	206-382-6322	<a href="mailto:Jim.schettler@jacobs.com">Jim.schettler@jacobs.com</a>
Schmidt, Virgil	WSDOT-HQ	360-705-7825	<a href="mailto:schmidv@wsdot.wa.gov">schmidv@wsdot.wa.gov</a>
Sheikhizadeh, M.	WSDOT-HQ	360-705-7828	<a href="mailto:sheikhm@wsdot.wa.gov">sheikhm@wsdot.wa.gov</a>
Smith, Tobin	Max J. Kuney	509-535-0651	<a href="mailto:tobin@maxkuney.com">tobin@maxkuney.com</a>
Swenson, Robb	General Const.	360-394-1407	<a href="mailto:Robb.Swenson@kiewit.com">Robb.Swenson@kiewit.com</a>

The meeting started at 9:00 AM. The May 20<sup>th</sup> meeting notes were approved with a few suggested editorial revisions to the vibration specs. Jack Ecklund was in attendance for John Quigg.

### **Bridge Deck Curing**

Mo handed out a few revisions to the bridge deck curing spec (Section 6-02.3(11)) and the future direction that the department wanted to move in regards to this issue. All references to bleed water in the current specification are being deleted and the finished concrete is to be covered with curing compound within 15 minutes of tining. The use of burline was also discussed as an acceptable cover. Soaker hoses will be required and will need to be charged with water frequently to keep the deck wet during the course of curing.

The ultimate goal of the revised curing is to delete the use of curing compound and immediately cover the deck after texturing with wet burlap to produce a deck free of cracks. FHWA does not want a total deletion of curing compound on deck concrete at this time but would like to see some test jobs where this is done to see if there are any problems.

**Action Item:** Discuss further when new revisions are proposed

### **Deck Finishing Methods**

There were some discussions on quality of deck finish when Texas screeds were used. A few Contractors expressed a concern about deleting Texas screeds. They mentioned that with experienced finishers familiar with the equipment it produces satisfactory results. Also, it was highlighted that the current Specs require approval of the Engineer with limited application on narrow bridge widenings. Some people thought that the awareness of the industry and the State should be raised as to how to effectively use this piece of equipment so as to not have problems in the future.

**Action Item:** Future discussion item if changes to the current specs are proposed

### **Requirement of Weighing Trusses Before Demolition**

This discussion centered around the picking of large trusses over water with cranes during bridge demolition. In several previous contracts the pick was close to the maximum load of the crane and in several cases the crane could not pick the load as it was originally set up. This requirement would put in the contract that the trusses would have to be picked off their bearings with portapowers and the weight calculated from the hydraulic pressure necessary to pick the truss. This would make the weight that the crane was picking more accurate than calculating it from old construction plans. Some of the contractors were already doing this; some contractors thought that it was not an issue the State should be involved with because it was the contractor's problem.

The State's concern was a safety issue and also that when this work was done, it usually was a media event, with a lot of traffic control set up that may not be utilized if the event didn't happen. Suggestions for any potential revisions to the current GSP:

- Provide an advisory on breaking the bearings loose prior to lifting
- Look into the necessity of requiring jack capacity in excess of 200% of calculated loads
- Explore the necessity of an advisory spec for the contractor to verify truss dead load prior to lifting

**Action Item:** Virgil will provide suggested changes to the current GSP for the next meeting

### **Proposed Revisions to the Std. Specs 6-02.3(6) & 6-02.3(24)D**

Mo handed out suggested specification change that essentially lap splices do not need to be in contact, that they can be spaced up to one-fifth of the lap splice length up to 6 inches maximum. Mo also handed out the AASHTO LRFD Bridge Design Specifications that has the same words stated above. Jugesh and Jim were going to look at the AASHTO specification and see if it Bridge Design is in agreement with this proposal.

**Action Item:** Jugesh will review the proposal and make a recommendation to the team at the next meeting.

### **WACA Report**

Mo handed out the new specification for cure boxes that will be added to the 2006 Standard Specifications. The committee questioned, “When concrete is placed at more than one location simultaneously, multiple cure boxes shall be provided.” and also “The cure box shall be the appropriate size to accommodate the number of concrete acceptance cylinders necessary or the Contractor shall provide additional cure boxes.” what these two sentences mean.

Mo said he would try to get Jim Walters from the lab to our next meeting so the contractors could talk to him about some of their concerns.

There was also a discussion about the new CDF specification. Several people questioned why there is a maximum strength of 275 psi; the contractors thought that it might be difficult to hit this window on strength. They would prefer to have the recipe mix design and no strength requirement.

**Action Item:** Mo will invite Jim Walters to discuss curing boxes and address questions/concerns at the next meeting

### **Ash Way Bridge Superstructure Jacking**

Mo showed a slide presentation on the superstructure lowering and Ryan Olson and Virgil Schmidt discussed some of the lessons learned on this project. Although no one quite knows the mechanism of failure yet, highlights of lessons learned were:

- Masonry blocks were used as temporary shoring and they failed during the lowering. The blocks were unreinforced. They were replaced with blocking made of steel and there were no further problems.
- Hydraulic jacks supported the bridge while it was being lowered for an extended time
- Neoprene pads on top of the blocking aided in providing a level surface during jacking
- The lowering scheme, although feasible, is cumbersome and time consuming. Explore other design options first before resorting to this method of construction.

**Action Item:** For information and learning purpose only. No further discussions are needed.

### **Other Items of Interest**

Mo handed out the latest revisions to the specs proposed by the Bridge Design on a new Standard Specification they included changes to the Sections:

- 1-07.7(2) – Load Limit Restrictions – Requires submittal of calculations when loads exceed 135% of legal loads
- 6-01.6 – Load Limits on Bridges Under Construction – Itemizes specific required calculations for submittal
- 6-02.3(17) – Added new precast segments
- 6-02.3(25)K – Added “D” dimension after 40 days in addition to the current 120 days
- 6-02.3(26)E – added post-tensioning duct gages
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### **Future Meeting Dates**

July 15<sup>th</sup>

Aug. 12<sup>th</sup>

Sept. 9<sup>th</sup>

Oct. 7<sup>th</sup>

Nov. 18<sup>th</sup>

The next meeting is July 15<sup>th</sup>.